

Date: Tue, 27 Apr 93 20:38:43 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #507
To: Info-Hams

Info-Hams Digest Tue, 27 Apr 93 Volume 93 : Issue 507

Today's Topics:

 AM Modulation Question
 AM Moulation Question (2 msgs)
 Daily Solar Geophysical Data Broadcast for 27 April
 Dayton disappointments (was: Want some advice.)
 Experience with W&W Associates?
 Grid dip meters (2 msgs)
 Meteor sats
 Mods for the HTX-202
 Paddle key question
 Raising our profile
 rec.radio.amateur reorg - final proposal after 30-day discussion
 STS-55 Element Set (117.24)
 Test passed, tickets on the way!

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 26 Apr 1993 18:04:34 +0000
From: agate!doc.ic.ac.uk!uknet!bnr.co.uk!demon!llondel.demon.co.uk!dave@ames.arpa
Subject: AM Modulation Question
To: info-hams@ucsd.edu

In article <747@radio.nl.nuwc.navy.mil> keith@radio.nl.nuwc.navy.mil writes:
> Maybe someone else can answer this question... do they still make AM
> broadcast transmitters with conventional modulators, or has everyone gone
> to more efficient methods?
>

> Regards,
> Keith (WA2Q)
> ----

> keith@radio.nl.nuwc.navy.mil

I believe the BBC 198kHz transmitter at Droitwich uses some form of phase modulation to achieve its output. If you add two PM signals together in the correct phase, it is possible to get something which looks like an AM signal as various sidebands cancel. This method allows the entire transmitter to run in class C and avoids having to modulate anything at a high potential. No idea if it is still done like this though.....

Dave

```
*****
* G4WRW @ GB7WRW.#41.GBR.EU AX25      *
* dave@llondel.demon.co.uk Internet *   I got tired of my old .sig so I   *
* g4wrw@g4wrw.ampr.org      Amprnet *   changed it for this one       *
*****
```

Date: Tue, 27 Apr 1993 12:45:21 GMT
From: usc!wupost!csrcn1.unl.edu!news.unomaha.edu!cwis.unomaha.edu!
rerickso@network.UCSD.EDU
Subject: AM Moulation Question
To: info-hams@ucsd.edu

Several years ago I worked with a Class C Plate Modulated transmitter called a Collins 820 E/F. It has been dubbed among, if not, the best broadcast transmitter ever made. It could even be modified to run 125% on positive peaks providing a reactor and the modulation transformer are replaced. However, I recall it took around 18,000 watts input to get 5400-watts output. So it was not efficient but the station lost fringe area when it went to a modern 90% efficiency transmitter. In other words there is no free lunch.

Ron
AK0N
rerickso@cwis.unomaha.edu

Date: Tue, 27 Apr 1993 20:08:19 GMT
From: pacbell.com!unet!pioneer!rmt@decwrl.dec.com
Subject: AM Moulation Question
To: info-hams@ucsd.edu

In article <Zkuk3B2w165w@jackatak.raider.net> jackhill@jackatak.raider.net (Jack GF Hill) writes:

>u1066579@csdvax.csd.unsw.edu.au writes:

material deleted>

>And, to show you what an "Old Buzzard" I am, I can not explain how a
>high power solid-state broadcasting transmitter would be modulated.
>However, for the Fire-Bottles technology with which I am familiar, the
>modulation is NOT on the control grid of the final amp...that is where
>the RF energy is input. Modulation is generally on the PLATE circuit,
>as close to the antenna as possible! ;^)
>
>Hope that helps...

Actually, there is grid modulation, screen grid modulation, supressor grid modulation and even cathode modulation. The different grid modulation types produce the required modulation with **MUCH** less power and expense than plate modulation. When I was a young ham (in the AM age) it was explained that plate modulation put out "much more sideband power". Neat explanation, but unfortunately not entirely true unless the plate modulation was greater than 100 %. 90% modulation from any of the methods gives you the same sideband power on a spectrum analyzer--I know because I measured it to settle an argument. Linearity may be an issue here for a music station, I have never measured the differences as it did not seem to be any different listening to voice. I do suspect that grid modulation would be more non linear than screen or plate modulation.

Rich Tweedie
K6VKT

Date: 28 Apr 93 03:01:16 GMT
From: news-mail-gateway@ucsd.edu
Subject: Daily Solar Geophysical Data Broadcast for 27 April
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 117, 04/27/93
10.7 FLUX=118.0 90-AVG=131 SSN=091 BKI=1020 2211 BAI=003
BGND-XRAY=B3.1 FLU1=5.2E+05 FLU10=1.4E+04 PKI=2121 2221 PAI=005
BOU-DEV=005,004,011,003,012,015,007,006 DEV-AVG=007 NT SWF=00:000
XRAY-MAX= C1.1 @ 0952UT XRAY-MIN= B2.7 @ 2243UT XRAY-AVG= B3.6
NEUTN-MAX= +000% @ 0005UT NEUTN-MIN= +000% @ 0005UT NEUTN-AVG= +0.0%
PCA-MAX= +0.0DB @ 0005UT PCA-MIN= +0.0DB @ 0005UT PCA-AVG= +0.0DB
BOUTF-MAX=55397NT @ 1349UT BOUTF-MIN=55372NT @ 1713UT BOUTF-AVG=55389NT
GOES7-MAX=P:+105NT@ 1909UT GOES7-MIN=N:+003NT@ 0536UT G7-AVG=+087,+035,+010
GOES6-MAX=P:+122NT@ 1719UT GOES6-MIN=N:-077NT@ 0342UT G6-AVG=+101,-010,-044

FLUXFCST=STD:115,115,120;SESC:115,115,120 BAI/PAI-FCST=005,005,005/010,010,010
KFCST=1223 2221 1223 2221 27DAY-AP=009,008 27DAY-KP=4221 2322 2332 2222
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 26 APR 93 was 56.6.
The Full Kp Indices for 26 APR 93 are: 1+ 2- 3o 2- 2- 2o 2+ 2-

Date: 26 Apr 93 19:27:46 GMT
From: olivea!gossip.pyramid.com!pyramid!infmx!moose!randall@ames.arpa
Subject: Dayton disappointments (was: Want some advice.)
To: info-hams@ucsd.edu

martinbw@jackatak.raider.net (Bruce Martin) writes:

>I returned last night from Dayton. It was an interesting trip. I was
>somewhat dissappointed by the ammount of not particularly HAM
>related junk at the flea market. I was dissappointed by the
>relativly few HF rigs for sale and way overpriced.

I have noticed the same thing at the big Foothill flea market
that they have every month in the SF Bay Area. There seems
to be more old computer junk, old test equipment, and completely
non-electronics-related items (e.g. Village People 8-tracks)
every year.

Do keep in mind that flea markets have a price-negotiation
environment. The posted price is usually going to be
too high, but the seller expects to haggle.

Also, with the fantastic new rigs on the market like the
new tiny Kenwood mobile (TS-50 I think), Icom 737, and
Yaesu 890 and 990, there are a number of 2-5 year-old-rigs
that are for sale, with a \$500-\$700 price range. Hams are
selling them, so they can get one of the new rigs. They are
completely solid state with digital readout and modern features.
A popular favorite is the Icom-735. Check rec.radio.swap.

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Randall Rhea	Informix Software, Inc.
Project Manager, MIS Sales/Marketing Systems	uunet!pyramid!infmx!randall

Date: 27 Apr 93 17:10:42 GMT
From: ogicse!das-news.harvard.edu!noc.near.net!squam.banyan.com!banyan.com!
dts@network.UCSD.EDU
Subject: Experience with W&W Associates?
To: info-hams@ucsd.edu

In article <C61p2u.G9p@cbnewse.cb.att.com>, waco@cbnewse.cb.att.com

(john.l.broughton) writes:

|> Has anyone had any dealings with W&W Associates? I have been looking for a gel
cell
|> to power my camcorder and they offer the Powerpac+ for HTs (12V) and for cell
phones
|> and camcorders (6V) with adaptors for specific equipment. I have a Quantum gel
cell
|> for my HT which I am very happy with, but after talking to them, they don't
|> specifically make gel cells with adaptors for camcorders.

The Quantum battery is a sealed lead acid design, not a gel. I like the quantum,
and just picked up the adapter for the FT-530 at Dayton. Anyone need an adapter
for a W2A, 24AT or other Icom using this battery design?

|>

|> I would appreciate any information on the company and specifically on their
Powerpac+

|> gel cell from anyone who has first-hand knowledge.

|>

As for W & W, I bought a battery from them at Dayton. When we got back to the
hotel, I popped it in the quick charger. The battery worked just fine, but the
casing was of poor quality and would not mate well with the radio (it would not
slide on far enough to lock, though the contacts were touching and I verified the
battery's operation).

I took the battery back to them the next day, and they refunded the money. The
W&W fellow DID manage to get the battery to lock onto the HT, using quite a bit
more force than I was willing to apply. It was my opinion that the same amount of
force (nearly none) required to attach a Yaesu pack should suffice.

|> E-mail response is acceptable or a posting to the net.

|>

|> Thanks in advance,

|>

|>

|>

|> John Broughton

|>

```
|> #####
|> # John L. Broughton      snail mail: Room 1K-324      #
|> # AT&T                  1200 E. Warrenville Rd.      #
|> #                      P.O. Box 3045                #
|> #                      Naperville, IL 60566-7045    #
|> #                      (708) 713-4319               #
|> #                      e-mail: john.l.broughton@att.com #
|> #                      att!john.l.broughton         #
|> #                      ihlpe!waco                  #
|> #                      air mail (HF, VHF): WB9VGJ     #
|> #####
```

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-----
Daniel Senie          Internet:      dts@banyan.com
Banyan Systems, Inc.  Compuserve:   74176,1347
508-898-1188          Packet Radio: N1JEB@WA1PHY.MA
```

```
-----
Date: 27 Apr 93 15:13:05 EDT
From: news.cerf.net!pagesat!olivea!sgigate!sgiblab!wetware!spunky.RedBrick.COM!
psinntp!psinntp!arrl.org@network.UCSD.EDU
Subject: Grid dip meters
To: info-hams@ucsd.edu
```

In rec.radio.amateur.misc, mcneely@binah.cc.brandeis.edu writes:

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>I have been attempting to find a source for gird dip meters that cover the
>range 1 MHZ to 250 MHZ all of the venders I have contacted have'nt been able
>to help me I need one to replace a old unit that died,I use it for teaching
>in undergraduate physics lab.
>Thanks, Matt.
```

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Date: Tue, 27 Apr 1993 12:29:18 GMT
From: usc!howland.reston.ans.net!noc.near.net!news.cs.brandeis.edu!
binah.cc.brandeis.edu!MCNEELY@network.UCSD.EDU
Subject: Grid dip meters
To: info-hams@ucsd.edu
```

I have been attempting to find a source for gird dip meters that cover the range 1 MHZ to 250 MHZ all of the venders I have contacted have'nt been able to help me I need one to replace a old unit that died,I use it for teaching in undergraduate physics lab.
Thanks, Matt.

Date: 27 Apr 93 19:29:35 GMT
From: ogicse!uwm.edu!linac!att!cbnews!jmk@network.UCSD.EDU
Subject: Meteor sats
To: info-hams@ucsd.edu

After several trips to Dayton over the past few years I've finally amassed the makings of a polar-orbiting satellite APT reception station. I can pick up the NOAA satellites on 137.5 MHz regularly, but have never had any luck finding the Russian Meteor series, which I understand have better resolution.

Does anyone have any tips on how to find these, such as which ones have been active recently on what frequencies? I assume my tracking software is as good at predicting them as it is with NOAA-x, but they seem to pass over silently at all times of the day and night.

Sorry if this is a FAQ.

Joe Knapp jmk@cbvox.att.com

Date: 26 Apr 93 19:26:01 GMT
From: olivea!gossip.pyramid.com!pyramid!infmtx!moose!randall@ames.arpa
Subject: Mods for the HTX-202
To: info-hams@ucsd.edu

apeters2@ux4.cso.uiuc.edu (Anne Marie Peters) writes:

>nick@hotcity.COM (Nick Assar) writes:

>>Can someone send me mail (nick@hotcity.com) on any mods to the Realistic
>>HTX-202 2m Transceiver. Thanks.
>NO! I will not!
>not because I hate you, rather, there are none...

Not true. There are mods, but not any to increase the frequency coverage. The mods printed in mods books are bogus.

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Randall Rhea	Informix Software, Inc.
Project Manager, MIS Sales/Marketing Systems	uunet!pyramid!infmtx!randall

Date: Tue, 27 Apr 1993 03:08:44 GMT
From: overload.lbl.gov!agate!howland.reston.ans.net!gatech!darwin.sura.net!
zaphod.mps.ohio-state.edu!moe.ksu.ksu.edu!crcnis1.unl.edu!news.unomaha.edu!
nevada.edu!jimi!physics.@dog.ee.lbl.gov
Subject: Paddle key question
To: info-hams@ucsd.edu

In article <C641Is.88K@icon.rose.hp.com> greg@core.rose.hp.com (Greg Dolkas)
writes:

>jhw@rti.rti.org wrote:

>:

>: For right handers, pushing the paddle

>: to the right with the thumb caused the generation of dots. Pushing

>: it to the left with the index finger caused the generation of a

>: continuous dash that lasted as long as the paddle was pressed.

>: The push-paddle-to-right association with dots was fixed by the

>: construction of the bug and could not be changed.

>

>Right, and for us Left handers, you end up learning it backwards, which I

>am in the process of doing.

>

>I also play a right-handed guitar upside down, with fingering altered to match.

>You adapt...

>

>Greg KD6KGW

I am left handed but when I learned CW in 52', I learned to send
with my right hand. Now I can write with one hand and send with
the other. Neat in contests.

But am going /m now, so no writing involved.

Damn, what did he say his name was?????

"Ron", KU7Y

Date: 27 Apr 93 16:11:45 GMT
From: ogicse!uwm.edu!zaphod.mps.ohio-state.edu!moe.ksu.ksu.edu!kuhub.cc.ukans.edu!
heacock@network.UCSD.EDU
Subject: Raising our profile
To: info-hams@ucsd.edu

The Douglas County Amateur Radio Club has, for the past few years, set

up a packet radio station in a local mall and invited passers-by to stop and let us send Mother's Day greetings for them via packet radio. We have a club banner prominently displayed with meeting times and locations, and often have brochures and other information about ham radio and our club for people to take with them.

We usually do this a week or two before Mother's Day, so the messages have time to be delivered. We explain that the recipient doesn't have to be a ham, that the message will ultimately be delivered by a ham either in person or over the phone. Since this is a college town, we get quite a few college students who enjoy a chance to send Mom their love in a novel way. (And, of course, it's free of charge.)

This year we're moving from the mall to a location on the KU campus, since the date coincides with a day of campus festivities. I believe the KU ARC will be joining us for the event.

It is lots of fun, it provides a unique service to the community, and ham radio gets a little more exposure.

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+-----+
| Doug Heacock, Academic Computing | heacock@kuhub.cc.ukans.edu |
| Services, The University of Kansas | heacock@ukanvax.bitnet |
| Lawrence, KS 66045 | Amateur radio: N0NZQ/AE |
+-----+
```

Date: 27 Apr 93 07:10:51 GMT
From: pacbell.com!amdahl!amdahl!ikluft@network.UCSD.EDU
Subject: rec.radio.amateur reorg - final proposal after 30-day discussion
To: info-hams@ucsd.edu

Results of the discussion on the rec.radio.amateur reorganization

30-day discussion period ended: April 26, 1993

Based on a Request for Discussion (RFD), a discussion of a possible reorganization of rec.radio.amateur was held for 30 days on the news.groups newsgroup. The location of the discussion was required by the "Guidelines for UseNet Newsgroup Creation" and was announced many times in the rec.radio.amateur.* newsgroups.

The result of the 30-day discussion appears favorable so we will proceed with the next step in the guidelines. A Call for Votes (CFV) will be issued as soon as arrangements for voting can be made. (See "Notes on how to proceed with the CFV" below.)

Unchanged Newsgroups

It was agreed that these newsgroups will not change. They will not be on the CFV.

rec.radio.amateur.misc	all Ham radio topics not covered below
rec.radio.amateur.policy	regulations & policy issues

Newsgroups That Will Be on the CFV

All of these groups are UNMODERATED.

rec.radio.amateur.digital.misc	packet radio & other digital modes [includes old rec.radio.amateur.packet]
rec.radio.amateur.digital.tcp-ip	TCP/IP via packet radio
rec.radio.amateur.dx	DX (long distance) communications
rec.radio.amateur.antenna	discussion of amateur radio antennas
rec.radio.amateur.equipment	amateur radio equipment: manufactured products, modifications
rec.radio.amateur.instruction	Ham radio instruction & examination
rec.radio.amateur.operating	discussion of operating procedures
rec.radio.amateur.homebrew	radio construction & experimentation
rec.radio.amateur.space	amateur radio in space: satellites, earth-moon-earth (EME), shuttle, MIR
rec.radio.amateur.emerg-services	emergency services: RACES, ARES, NTS
rec.radio.amateur.rdf	radio direction finding: recreational hunts and searches for interference

Notes on how to proceed with the CFV

The guidelines say that there should be minimal delay between the close of the discussion period and the posting of a CFV. In order to comply with that, we'll take this back to the rra-reorg mail list. If you would like to join the discussion to help review the final wording of the CFV, send mail to

Internet mail: rra-reorg-request@amdahl.com

UUCP mail: amdahl!rra-reorg-request

and you will be added to the list.

All decisions made in the discussion period will be held UNMODIFIABLE in the writing of the CFV. The scope of the discussion will encompass wording of a proper CFV based on this discussion and arrangements for a vote-collecting site. This may include filling out the wording of the newsgroup charters but not changing their intent.

Note: the 4/24 "evolving proposal" said that we might use MIT's offer to host newsgroup votes. As it turns out, that may not be possible because the

student/employee who handles that is in the crunch period prior to graduation. The members of the rra-reorg mail list will need to determine an acceptable site for the voting.

--

Ian Klufft KD6EUI PP-ASEL Amdahl Corporation, Open Systems Development
iklufft@uts.amdahl.com Santa Clara, CA
[disclaimer: any opinions expressed are mine only... not those of my employer]

Date: Tue, 27 Apr 1993 23:26:44 GMT
From: newshub.nosc.mil!crash!telesoft!garym@network.UCSD.EDU
Subject: STS-55 Element Set (117.24)
To: info-hams@ucsd.edu

This is the latest STS-55 element set as of orbit 10. The elements are based on NORAD tracking data and were provided by Dr. TS Kelso.

--GaryM

STS 55

1	22640U	93	27	A	93117.24999999	.00043819	00000-0	13174-3	0	47
2	22640	28.4694	264.3224	0004988	261.3916	194.3250	15.90699957	104		

--

Gary Morris KK6YB Internet: elements-request@alsys.com
San Diego, CA, USA Phone: +1 619-457-2700
(for Shuttle Elements subscription info, email: listserv@alsys.com)

Date: 27 Apr 93 16:53:53 GMT
From: nycvmic1.ibm.com@uunet.uu.net
Subject: Test passed, tickets on the way!
To: info-hams@ucsd.edu

Congratulations on passing your exams and welcome to the "family"

Steve - N2UBP

Date: (null)
From: (null)
File: dipmtrsrc.txt Revision: January 19, 1993

Dip meter sources:

The following companies sell Dip meters (a.k.a. grid-dip meters)

Automated Industrial Electronics Corp
POB 70
Batesburg SC 29006
(803) 532-9256

EEB
323 Mill St NE
Vienna VA 22180
(703) 938-3350
used, repairable only (if they still have any left)

James Millen
POB 4215
Andover MA 01810
may be long delivery time

Unidella
(508) 975-2711

The Measurements model 159 and the older model 59 are available again, from a chap in Batesburg, SC. He also will rebuild older ones. This info is 2 years old, so you might check whether he is still in business.

The company is:

Automated Industrial Electronics Corp
P O Box 70
Batesburg, SC 29006
Phone (803) 532-9256

It has the remote head with tube inside, and comes with a variety of plug in coils.

The members and HQ staff would like to thank the following people for their contributions to this information file:

KA1CV, WB4PRO

Send any additional information or changes to ehare@arrl.org.

73 from ARRL HQ.

Ed Hare, KA1CV
American Radio Relay League
225 Main St.
Newington, CT 06111

ehare@arrl.org

You will never put the puzzle together

(203) 666-1541 - voice if you keep putting all the pieces
ARRL Laboratory Supervisor back in the box.
RFI, xmtr and rcvr testing

Date: 27 Apr 93 15:17:29 GMT
From: titan.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa
To: info-hams@ucsd.edu

References <16BB5F30F.97994779@wsuvm1.csc.wsu.edu>,
<BAT.93Apr20084203@gdstech.GRUMMAN.COM>,
<1993Apr26.185220.8665@mixcom.mixcom.com><
Subject : Re: Fast connect/disconnect (in/out) mobile rigs?

In article <1993Apr26.185220.8665@mixcom.mixcom.com>, mei.mon
<mei.mon@mixcom.mixcom.com> wrote:
> Are there any quick connect/disconnect mobile rigs (2 meter or dual band)
> available? I'm thinking of something where the entire unit (not just the
> front panel) slides in or out of a chassis which automatically makes/breaks
> the power AND antenna connections. I would like to be able to just grab
> hold of the unit and pull. A neat feature would be a similar "back plane"
> in my condo that I could then slide it into when I get home! Any one
> make such a rig?

Kevin-

Look for a mobile MOUNT that offers the quick-disconnect capability. Some
radios may have such a mounting bracket available as an option, but you may
also find what you want as in generic.

These mounting brackets are available from commercial two-way outlets, as
well as from some Ham outlets. Also, if your radio is fairly small and
light, there may be something available from cellular phone stores.

73, Fred, K4DII

fred-mckenzie@ksc.nasa.gov

End of Info-Hams Digest V93 #507
